

#### Project Overview

- Authority and Funding
- Goal
- Objectives
- Study Area





#### Authority and Funding

Congress appropriated \$4,000,000 in FY 2001

"...for the Corps of Engineers, in coordination with other Federal agencies and the Brazos River Authority, ...to assess the impact of perchlorate associated with the former NWIRP (Naval Weapons Industrial Reserve Plant) at McGregor, Texas."

- Public Law 106-377



#### Project Goal

### Evaluate potential human and environmental exposure to perchlorate in the lakes Waco and Belton study area.





#### **Objectives**

- Develop effective community relations plan.
- Compile existing study area information.
- Identify and fill the key data gaps.
- Define the Conceptual Study Model (CSM).
- Evaluate fate and transport pathways.
- Evaluate potential environmental exposure to perchlorate in the study area.
- Evaluate potential human exposure to perchlorate in the study area.
- Present recommendations for watershed protection.



#### Regulatory Perspective

Michael Honeycutt, Ph.D.

**Senior Toxicologist** 

**Texas Natural Resource Conservation Commission** 

Phone: 512-239-1793

Email: mhoneycu@tnrcc.state.tx.us





#### Regulatory Perspective

- Water contamination issues due to solubility
- Toxicology studies completed
- Ecotoxicology studies underway





#### Regulatory Perspective

- Drinking water No MCL, TNRCC Interim Action Level = 4 ppb
- Groundwater 4 ppb Residential, 7 ppb Commercial/Industrial
- Surface water 4 ppb





#### **Ecological Evaluation**

# Dr. Todd Anderson The Institute of Environmental and Human Health Texas Tech University





#### Ecological Assessment

## Assessing potential environmental impacts of perchlorate contamination in the Lake Waco and Lake Belton Watersheds





#### Risk = Exposure + Effect

